

Kaw Receives a National Teaching Award from the American Society of Engineering Education

Autar Kaw, a mechanical engineering professor at the University of South Florida, received the 2017-18 Ralph Coats Roe Award from the Mechanical Engineering Division of the American Society of Mechanical Engineers. Kaw accepted the award at the 125th ASEE Annual Conference and Exposition in Salt Lake City, Utah on June 25, 2018. He also gave an acceptance speech titled “*Journey of an Open CourseWare*” to promote open-access course materials, universal design for learning, and the ensuing relationship to equal access to higher education for students from low socioeconomic groups.



Dr. Kaw accepting the Ralph Coats Award from Lt. Col. Michael Benson, Chair of the Mechanical Engineering Division of the American Society of Mechanical Engineers.

The award “recognizes a mechanical engineering educator who is an outstanding teacher and who has made the notable professional contributions. The award is sponsored by the Mechanical Engineering Division of ASEE and consists of a \$10,000 honorarium, a plaque and travel expense reimbursement for attendance at the ASEE Annual Conference. The award is funded by an endowment provided by Burns and Roe, Inc....”

Kaw joined USF in 1987 and has been at the forefront of engineering education in developing open

courseware and MOOCs, incorporating personally developed interactive educational software, making textbooks affordable, using social media for dissemination of content and awareness of higher education challenges, and implementing engineering education research methods to evaluate the cognitive and affective gains of teaching methods such as blended, flipped and adaptive learning.

Funded by National Science Foundation (2002-19), under Professor Kaw’s leadership, he and his colleagues from around the nation have developed implemented, refined and assessed online resources for an open courseware in Numerical Methods. This courseware annually receives 1,000,000+ page views, 1,800,000+ views of the YouTube lectures and 100,000+ annual visitors to the Numerical Methods Guy blog.

Kaw has received several other national, regional and university awards including the 2012 U.S. Professor of the Year Award, the 2011 ASEE National Teaching Award, the 2004 ASME Curriculum Innovation Award, and the 1991 SAE Ralph-Teetor Award.

In the nomination letter written by the department chairperson, Dr. Rajiv Dubey mentions visiting Kaw's classroom a few years ago. He wrote, "A few summers ago, as a Department Chair, I decided to attend Professor Kaw's undergraduate Computational Methods class and it turned out to be an amazing experience. This was an overcrowded classroom, all wanting to sit in the front rows of the class. It was clear that Professor Kaw was well prepared for the class and had an air of self-confidence. His preparation included not just the technical lecture material, but also anecdotes, some relevant humor that involved the students and the popular culture....all this to make the class more interesting and fun. ... His enthusiasm and energy could be felt throughout the whole hour."

In addition to teaching and conducting research in the field of engineering education, Kaw has written four textbooks and published more than 100 technical papers in areas of mechanics of composite materials, bascule bridge design, thermal stresses, engineering education, and sports analytics. He is a co-patentee on special body armor. His opinion editorials have appeared in the Tampa Bay Times, Tampa Tribune and Chronicle Vitae. His work has been covered/cited/quoted in many media outlets including Chronicle of Higher Education, Inside Higher Education, U.S. Congressional Record, Florida Senate Resolution, ASEE Prism, Times of India, NSF Discovery, and Voice of America.